

## *Perizoma onurcani* sp. n. from Turkey (Geometridae: Larentiinae)

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**Abstract.** The description of a new geometrid moth, *Perizoma onurcani* sp. n., from northern Turkey (Trabzon Province) is given. The holotype and two paratypes (all females) of the new taxon are kept in the collection of the University of Mustafa Kemal, Hatay, Turkey (UMKH).

**Zusammenfassung.** *Perizoma onurcani* sp. n. wird aus der nördlichen Türkei (Provinz Trabzon) beschrieben. Der Holotypus und zwei Paratypen (alles Weibchen) der neuen Art werden in der Sammlung der Mustafa Kemal Universität, Hatay, Türkei (UMKH) aufbewahrt.

**Key words.** Lepidoptera, Geometridae, *Perizoma onurcani*, new species, Turkey.

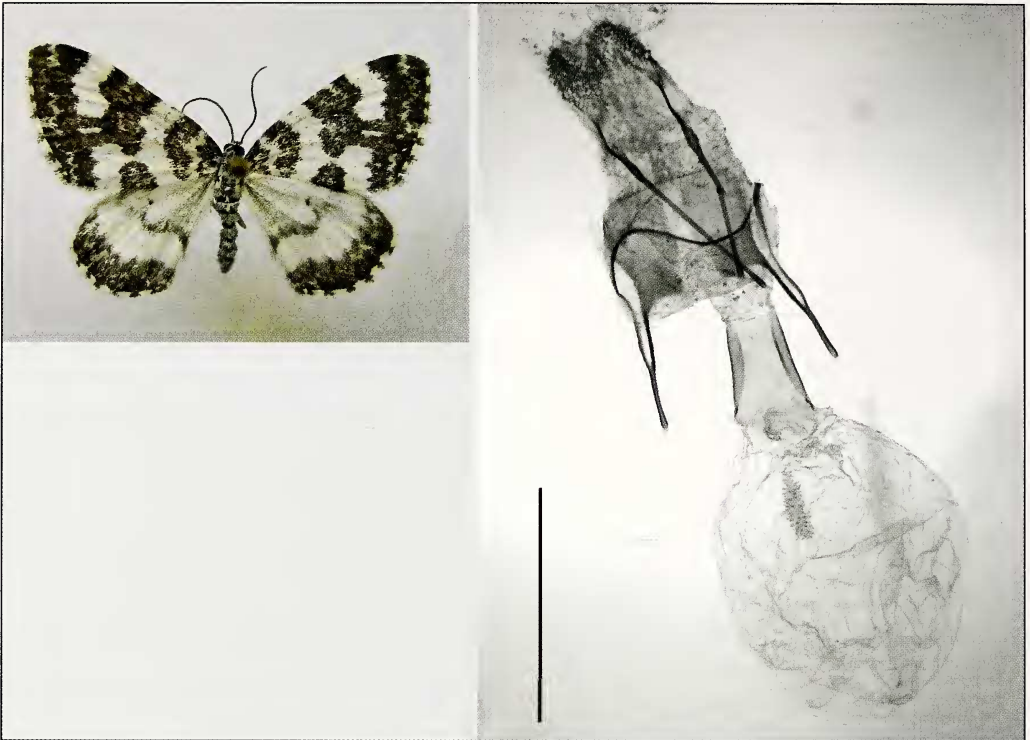
### Introduction

After the publications of Riemis (1994), Viidalepp (1996) and Mironov (2000, 2003) on the geometrid moths of Turkey, Transcaucasus (which belonged to the former U.S.S.R.), and Europe, the species of the genus *Perizoma* Hübner, 1825 of the fauna of Asia Minor were thought to be well known. Up until now, eight species of this genus have been recorded from the territory of Turkey, i.e. *P. alchemillata* (Linnaeus, 1758), *P. hydrata* (Treitschke, 1829), *P. parahydrata* Alberti, 1969, *P. gigas* Wiltshire, 1976, *P. bifaciata* (Haworth, 1809), *P. blandiata* ([Denis & Schiffermüller], 1775), *P. albulata* ([Denis & Schiffermüller], 1775), and *P. flavofasciata* (Thunberg, 1792). Recently, however, a new geometrid species was found near Trabzon, in the northern part of Turkey. This species is externally reminiscent of representatives of the genera *Pseudobaptria* Inoue, 1982 (Inoue 1982; Sato 2002; Mironov 2003) and *Epirrhoe* Hübner, 1825 (Pierce 1914; Prout 1912-1916; Błaszynski 1965; Urbahn 1968) rather than to any other species of *Perizoma*. Nevertheless, the venation and the female genitalia of this species are typical of representatives of the genus *Perizoma* (Pierce 1914; Prout 1912-1916; Błaszynski 1965; Mironov 2000, 2003).

### *Perizoma onurcani* sp. n.

**Material.** Holotype ♀. **Turkey**, Trabzon Province, Macka, Camlıduz, 40°45'N; 39°28'E, 1516 m, 30.vi.2005, at light, leg. F. Can (UMKH). Paratypes: 2♀, same data, but 1470 m, 16.vi.2003, at light, leg. O. Doganlar (slide no. 58) (UMKH).

**Description** (Fig. 1). Wingspan 26.5–28.0 mm; fore wing 14.5–15.0 mm. Labial palpi about 1.2 times diameter of eye. Frons and vertex covered with black and white scales. Antennae filiform, brown. Thorax dorsally covered with mixture of black and white scales. Fore wing broad with slightly arched costal and terminal margins and rounded



**Figs. 1–2.** 1. *Perizoma onurcani* sp. n., holotype ♀. 2. Female genitalia of *Perizoma onurcani* sp. n. (slide no. 58).

apex; ground colour rich black and white; basal area broad, black, irrorate with white scales, with broken broad white transverse band in middle; outer border of black basal area evenly curved; medial area black, irrorate with white scales, broadened to costa, divided by narrow, longitudinal white band along Cu2 and connected with terminal area by two short, longitudinal black bands between M2-M3 and M3-Cu1; outer border of medial area strongly curved twice towards termen of fore wing; terminal area broad, black, with narrow, wavy white subterminal line forming small whitish spot at termen between M2 and M3. Fringe clearly chequered black and white. Hind wing rounded, broad; basal half covered with mixture of black and white scales; outer border of basal area sinuate, darker, blackish; transverse band between basal and terminal areas very broad and clearly white; terminal area broad, black, slightly irrorate with white scales, especially along inner border, with whitish wavy subterminal line; discal dot small, rounded or ovoid, black, placed in basal area closer to costal margin of hind wing; fringes as on fore wing. Abdomen pale grey, irrorate with black scales, with narrow black transverse bands along posterior margin of each segment.

Female genitalia (Fig. 2). Bursa copulatrix large, ovate, membranous, with one narrow, elongate scobinate signum. Ductus seminalis attached to posterior part of corpus bursae near base of colliculum. Colliculum collar-like, rather flat, large, elongate and broad, slightly tapered posteriorly. Antrum membranous. Tergite A8 rather broad

with rounded posterior corners and broad, slightly sclerotized medial area. Anterior and posterior apophyses thin, elongate, slightly expanded at apices; posterior apophyses dilated at their bases. Basal arms of anterior apophyses connected with each other by a long and narrow, heavily sclerotized band encircling antrum. Papillae anales large, rather broad and elongate, covered with numerous medium-sized setae.

**Habitat.** The type series was collected at light at altitudes of 1,470 to 1,516 m above sea level. The natural vegetation in this area is ‘plateau dominated’ by forest roses, blackberry, privet, firebush, fern, wild strawberry, as well as forest trees such as spruce, fir, and beech.

**Life history.** The moths were collected while flying to the light of mercury vapor lamps (160 W). The immature stages are unknown.

**Distribution.** The species is known only from its type locality – the northern part of Asian Turkey (Trabzon Province).

**Derivatio nominis.** This species is dedicated to Onurcan - the son of Dr. Feza Can (Doganlar).

**Remarks.** This species is, externally, reminiscent of representatives of the genera *Pseudobaptria* and *Epirrhoe* rather than of any other species of the genus *Perizoma*. *Perizoma onurcani* sp. n. can be recognized readily and distinguished easily from any other Larentiinae species by the distinctive black and white maculation. The female genitalia are more similar to those of *Perizoma flavofasciata* (Thunberg, 1792), but clearly distinguishable by the shorter scobinate signum in the bursa copulatrix and the presence of a slightly longitudinally sclerotized, medial area on the eighth tergite. The relationship of *Perizoma onurcani* sp.n. with any other species of this genus is not known.

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